mists, I cannot refer the first attack to anything but atmospheric influences and disturbances, causing an unhealthy state of the vines, thus rendering them a fit prey to this fungus (the germs of which are floating in the air), and unable to resist its insidious attacks.

"It would require that I should write a volume rather than a letter, were I to attempt to give a complete history of my experiments. I see in my brother's present letter a confirmation of my own experience as to the new shoots and flower-buds absolutely bursting forth covered with filaments of the *Oidium*."

The following papers were read:—

1. "Notes on the Flora of Dumfries," by W. Lauder Lindsay, M.D.

The author's remarks applied to the district immediately around Dumfries, radiating to a varying distance of five to ten miles from the centre.

His object was not so much to mention the floral treasures of the county, as to call attention to the fact of the extreme luxuriance of the common vegetation, not having noticed in any other part of this country, or in any other countries, our common wild plants growing to such a height or in such profusion.

2. "Notice of Plants in the neighbourhood of Oban, and in part of the Island of Mull," by David Philip Maclagan, Esq. The author having resided at Oban during the months of August and September last, had spent part of his time in examining the botany of the neighbourhood, and now laid before the Society a notice of some of his excursions, and a list of all the plants observed, amounting to about 400 species.

3. "On Plants found in Strachur, Argyleshire, and in Roxburghshire," by W. Nichol, Esq.

4. "On Lichens collected on the Breadalbane Mountains and Woods," by Hugh Macmillan, Esq.

5. "On Harmonious Colouring in Plants," by Professor M'Cosh.

MISCELLANEOUS.

On the Movements and Reproduction of the Naviculæ.

By M. Focke.

The author, like Ehrenberg, refers the *Diatomaceæ* to the animal kingdom. According to his account the movements of the *Naviculæ* are effected by means of a kind of temporary, exsertile and retractile, foot, which passes through openings discovered by the author on the sides of the carapace.

According to M. Focke, the reproduction of some species of *Naviculæ* presents a strange complication of the phænomena of "alternation of generations" and conjugation; *Navicula bifrons*, for example, forms by the spontaneous division of its internal substance, spherical bodies which like gemmules give rise to *Surirella microcora*. These by conjugation produce *N. splendida*, which gives rise to

N. bifrons by the same process. This last gemmation has been observed by the author in all its phases. He saw two specimens of *N. splendida*, enveloped in a sort of mucosity, open and evacuate the whole of their contents, which served to form a *N. bifrons*. The production of the reproductive bodies by the latter was also observed; but their development into *Surirella microcora* and the production of *N. splendida* by conjugation rests entirely on the inductions of the author.

These facts require revision and confirmation, but they are still worthy of the attention of observers, and appear to point to phænomena quite as singular as those which have been revealed to us within the last few years by the study of the reproduction of so many of the lower animals. They in fact present in a manner the converse of the phænomena exhibited in the ordinary alternation of generations, as several germs or eggs are necessary for the production of the last individual of the cycle.—*Comptes Rendus*, Jan. 22, 1855, p. 167.

On Lottia zebrina *and* L. Scurra. By Dr. J. E. Gray.

In the Philosophical Transactions for 1833, I referred these common Peruvian Mollusca to the genus *Lottia*. If I recollect rightly, M. D'Orbigny, in his 'Voyage to South America,' from the examination of some animals of these shells in Paris, figures these animals, and refers them to the genus *Patella*; and putting faith in the accuracy of this determination in the Catalogue of M. D'Orbigny's collection, which has lately been transferred to the British Museum, I observed, "These are *Patellæ*, and not *Lottiæ*." In the Mollusca collected by M. Souleyet during the voyage of the '*Bonite*,' which have lately been acquired by the Museum, there are several specimens of this shell, belonging to two of the varieties of it which M. D'Orbigny has regarded as distinct species, and, on examination of the animals, they prove to be *Lottiæ*, and not *Patellæ*;—peculiar, like *Lottia Scurra*, for having a series of rather large beards round the inner edge of the mantle; and I suppose M. D'Orbigny must have mistaken these beards for the gills, and thus made the mistake which I am now desirous of rectifying. The gill of *Lottia zebrina*, and of several other species without or with only very rudimentary beards on the mantle-edge, as *L. punctata*, is free and floating in the nuchal mantle-cavity for the greater part of its length, while the gill of *L. Scurra*, the type of the proposed genus *Scurria*, is attached by its outer or left edge to the inner surface of the mantle, which induced me, with its peculiar habits, to regard it as a genus distinct from *Lottia*.

Description of a new species of Sorex, *from India.*
By R. Templeton.

Sorex? purpurascens, n. sp.

Dark slate-coloured, with a tinge of purple; snout beneath and lower lip brownish, with a mesial groove above, running back half the distance to the eyes; front covered with black hairs having white